

AMENDMENTS TO THE CLAIMS

Claims 1-13 (Canceled).

Claim 14 (Currently amended): A hingeless rotor defining an axis of rotation, comprising

a rotor mast;

a torque-transmission element disposed rotationally fixed with respect to the rotor mast; and

at least one plate-shaped rotor head element having a first group of arms and a second group of arms, the axis of rotation of the rotor passing through the at least one plate-shaped rotor head element, wherein the first group of arms includes a plurality of bending-flexible rotor blade-connection arms that dissipate centrifugal forces, each of which is connectable to a rotor blade, and wherein the second group of arms includes a plurality of bending-flexible rotor mast-connection arms that are free of centrifugal force and connecting the plate-shaped rotor head element to the torque-transmission element,

wherein the plate-shaped rotor head element includes a central opening, and wherein at least a portion of the rotor mast extends through the central opening connection-free.

Claim 15 (new): The rotor as recited in claim 14, wherein the first and second groups of arms are integrally connected portions of the plate-shaped rotor head element.

Claim 16 (new): The rotor as recited in claim 14, wherein the rotor blade-connection arms are disposed offset with respect to the rotor mast-connection arms by an angle α .

Claim 17 (new): The rotor as recited in claim 14, wherein the rotor mast-connection arms lie in a plane of the rotor blades.

Claim 18 (currently amended): The ~~A~~ hingeless rotor as recited in claim 14, defining an axis of rotation, comprising

a rotor mast;

a torque-transmission element disposed rotationally fixed with respect to the rotor mast;

and

at least one plate-shaped rotor head element having a first group of arms and a second group of arms, the axis of rotation of the rotor passing through the at least one plate-shaped rotor head element, wherein the first group of arms includes a plurality of bending-flexible rotor blade-connection arms that dissipate centrifugal forces, each of which is connectable to a rotor blade, and wherein the second group of arms includes a plurality of bending-flexible rotor mast-connection arms that are free of centrifugal force and connecting the plate-shaped rotor head element to the torque-transmission element.

wherein each of the rotor blade-connection arms has at least one slit and notched arm area angled at least one of upwards and downwards in a direction of the rotor axis from a plane of the plate, wherein the at least one arm area forms a rotor-mast connection arm and a loop-like horizontal projection of the respective rotor blade-connection arm.

Claim 19 (previously presented): The rotor as recited in claim 18, wherein for each rotor blade-connection arm two rotor mast-connection arms are provided extending above and below the respective rotor blade connection arm in the direction of the rotor axis.

Claim 20 (currently amended) The ~~A~~ hingeless rotor as recited in claim 14, defining an axis of rotation, comprising

a rotor mast;

a torque-transmission element disposed rotationally fixed with respect to the rotor mast;

and

at least one plate-shaped rotor head element having a first group of arms and a second group of arms, the axis of rotation of the rotor passing through the at least one plate-shaped rotor head element, wherein the first group of arms includes a plurality of bending-flexible rotor blade-

connection arms that dissipate centrifugal forces, each of which is connectable to a rotor blade, and wherein the second group of arms includes a plurality of bending-flexible rotor mast-connection arms that are free of centrifugal force and connecting the plate-shaped rotor head element to the torque-transmission element.

wherein the rotor blade-connection arms and the rotor mast-connection arms each extend in the same radial directions and in a different plane relative to a plane of the rotor blades.

Claim 21 (currently amended): ~~The A hingeless rotor as recited in claim 14, defining an axis of rotation, comprising~~

a rotor mast;

a torque-transmission element disposed rotationally fixed with respect to the rotor mast;

and

at least one plate-shaped rotor head element having a first group of arms and a second group of arms, the axis of rotation of the rotor passing through the at least one plate-shaped rotor head element, wherein the first group of arms includes a plurality of bending-flexible rotor blade-connection arms that dissipate centrifugal forces, each of which is connectable to a rotor blade, and wherein the second group of arms includes a plurality of bending-flexible rotor mast-connection arms that are free of centrifugal force and connecting the plate-shaped rotor head element to the torque-transmission element.

wherein the rotor blade-connection arms and the rotor mast-connection arms each extend in different radial directions in different planes relative to the plane of the rotor blades.

Claim 22 (currently amended) ~~The A hingeless rotor as recited in claim 14, defining an axis of rotation, comprising~~

a rotor mast;

a torque-transmission element disposed rotationally fixed with respect to the rotor mast;

and

at least one plate-shaped rotor head element having a first group of arms and a second group of arms, the axis of rotation of the rotor passing through the at least one plate-shaped rotor head element, wherein the first group of arms includes a plurality of bending-flexible rotor blade-connection arms that dissipate centrifugal forces, each of which is connectable to a rotor blade, and wherein the second group of arms includes a plurality of bending-flexible rotor mast-connection arms that are free of centrifugal force and connecting the plate-shaped rotor head element to the torque-transmission element,

wherein each rotor ~~mast~~-~~connection~~-blade-connection arm has a separation point on an radial outer free end configured to detachably fasten a rotor blade.

Claim 23 (previously presented): The rotor as recited in claim 14, wherein each rotor blade-connection arm is an integrally connected with a rotor blade.

Claim 24 (currently amended): The A hingeless rotor as recited in claim 14, defining an
axis of rotation, comprising

a rotor mast;

a torque-transmission element disposed rotationally fixed with respect to the rotor mast;

and

at least one plate-shaped rotor head element having a first group of arms and a second group of arms, the axis of rotation of the rotor passing through the at least one plate-shaped rotor head element, wherein the first group of arms includes a plurality of bending-flexible rotor blade-connection arms that dissipate centrifugal forces, each of which is connectable to a rotor blade, and wherein the second group of arms includes a plurality of bending-flexible rotor mast-connection arms that are free of centrifugal force and connecting the plate-shaped rotor head element to the torque-transmission element,

wherein each of the rotor blade-connection arms is an integral part of a first plate part, and each of the rotor mast connection-arms is an integral part of a second separate plate part, the first and second plate parts being separate from one another and are combined to form the plate-shaped rotor head element.

Claim 25 (cancelled)

Claim 26 (previously presented): A rotary-wing aircraft that includes at least one rotor according to claim 14.

Claim 27 (previously presented): The rotary-wing aircraft as recited in claim 26, wherein the rotary wing aircraft is at least one of a helicopter and a tilt rotor helicopter.